

Embedded ATX Form Factor Specification Rev 1.0

Product Highlights

- Low Profile form factor for flat-panel display oriented applications or slim appliances
- Enables off-the-shelf embedded boards for quick time-to-market, lower development costs
- Expanded I/O region for greater system flexibility
- Ultra low-profile PCI for expansion capabilities
- Compatibility with existing ATX specifications for reduced investment
 - Standard ATX power supply connector
 - μ ATX-compatible board size and mounting holes
 - Expanded ATX I/O region
- Front-panel I/O header specification for reduced manufacturing, tooling costs
- Support for various thermal solutions to fit multiple form factors

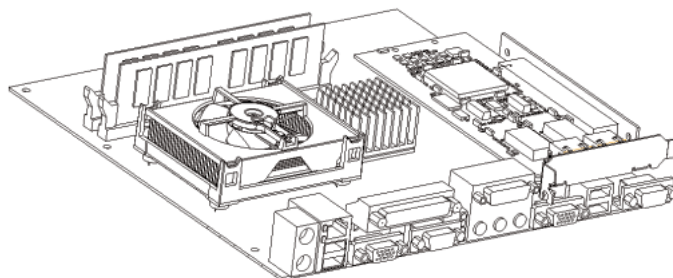


Diagram of Embedded ATX form factor

Embedded ATX strives to enable OEMs to lower board development costs and reduce enclosure investments by allowing them to use off-the-shelf boards for a variety of applications, rather than custom boards. Off-the-shelf boards using the Embedded ATX form factor specification allow OEMs to increase design reuse, and to facilitate greater competition on the open board market. At the same time, EmbATX allows OEMs to standardize on a consistent form factor for enclosures, display housings, and external chassis, reducing the cost to develop new models and form factors.

Embedded ATX provides a specification capable of servicing a large variety of applications, allowing OEMs, ODMs, EMSs and CMs, to reuse design elements and enjoy the reduced cost and innovative features of a highly competitive market for hardware building blocks.

The Embedded ATX form factor specification provides a platform for embedded building block suppliers to deliver new and compelling products to an existing installed base. This form factor enables the opportunity to provide innovation balanced with competition to a large number of high-growth market segments.

Specification Overview

Embedded ATX (EmbATX) is a low-profile form factor specification for embedded applications, featuring compatibility with the existing ATX family of desktop form factors driven by Intel®. With industry standard specifications, such as Embedded ATX, there are economies of scale that reduce motherboard development costs as well as enclosure design and tooling, and chassis design investments, while supporting the industry's trend toward using standard, high-volume motherboards.

Intel, along with industry-leading OEMs, has developed the EmbATX specification in an effort to lower development costs and catalyze growth in various embedded market segments; including kiosks, media appliances, Point-of-Sale (POS) devices, thin clients, residential gateways, networking appliances, Web appliances, and a variety of other interactive clients.

Feature and Benefit

Feature	Benefit
Expanded I/O region	Additional connector space for embedded applications
Very Low profile (< 2in.)	Supports very small form factors (< 2-liter)
Right-angle PCI	Low profile expansion
ATX compatibility	Reduced cost; potential for re-use (design and building block)
uATX size	Can fit in existing enclosures same board, multiple form factors)
Support for passive thermal designs	Keepout region around CPU allows thermal conduction to enclosure mounting
Standardized header pinouts	

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